51-9

WHEELABRATOR

AMERICAN FOUNDRY
EQUIPMENT COMPANY
Mishawaka, Indiana, U. S. A.

The desirability of performing the function of abrasive cleaning without the use of compressed air, has been recognized for over half a century, yet heretofore it has never been accomplished.

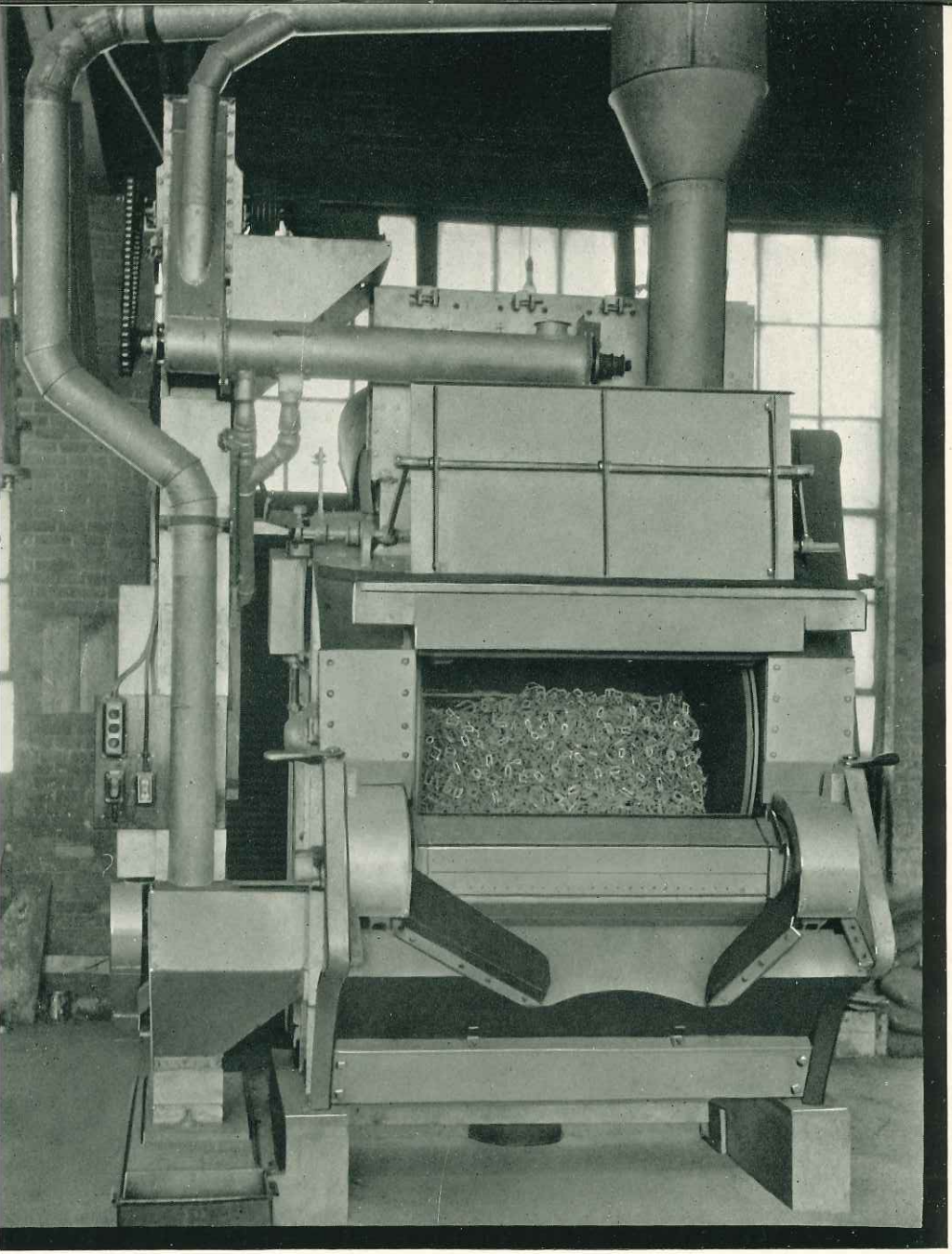
After years of effort, involving literally thousands of tests, the American Foundry Equipment Company has developed the WHEELABRATOR, an airless abrasive cleaning method which will clean metal surfaces faster, better and at greatly reduced cost.

Long experience in pioneering advanced principles in abrasive cleaning equipment, such as the Humane type blast room, the Tum Blast Cleaner and other important developments, qualifies this company as leaders in this revolutionary cleaning method.

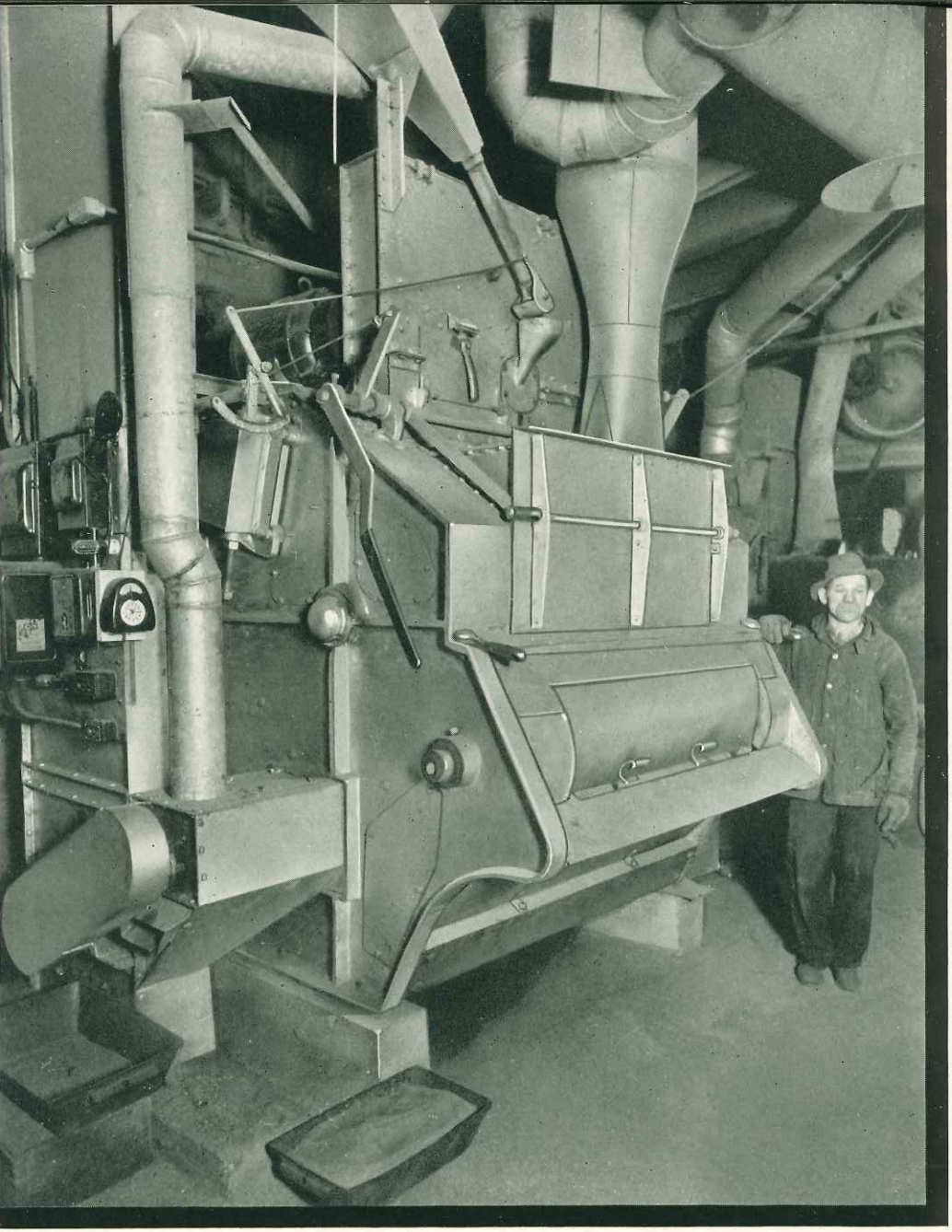
It does not require an intensive study to realize the value of the WHEELABRATOR. Production data and cost records from users, or one demonstration proves conclusively to any user of cleaning equipment the practicability and the value of this new airless abrasive cleaning method.

THE introduction of the American Tum Blast Cleaner several years ago, set a new standard of operating performance in sand and shot blasting. Its improved and radical design enabled faster loading by crane, monorail or hoist bucket, etc.; faster unloading by simply reversing the conveyor and allowing the castings to fall into any suitable receptacle; easy inspection and greater expositure of the castings to the cleaning blast. This method of performance gave greater production at lower operating costs. ★ Now the Airless WHEELABRATOR has been applied to the Tum Blast Cleaner. With all of the advantages which the Tum Blast possesses plus the savings effected by the WHEELABRATOR method of cleaning, together produce a cleaning unit which, unquestionably gives the greatest tonnage, fastest cleaning and lowest operating costs. ★ The application of the WHEELABRATOR to the Tum Blast replaces all of the blasting equipment with a specially designed and constructed wheel and a small motor. The elimination of the compressed air, necessary for pressure blasting equipment, means the elimination of costly power necessary to generate the air pressure. To supply compressed air for the three pressure nozzles used on the Tum Blast with pressure blasting, between 100HP to 125HP would be necessary depending upon the air pressure and nozzle size. In contrast, a maximum of 15HP is used to operate the WHEELABRATOR. This is a savings of 85HP to 110HP every time the equipment is operated. This alone

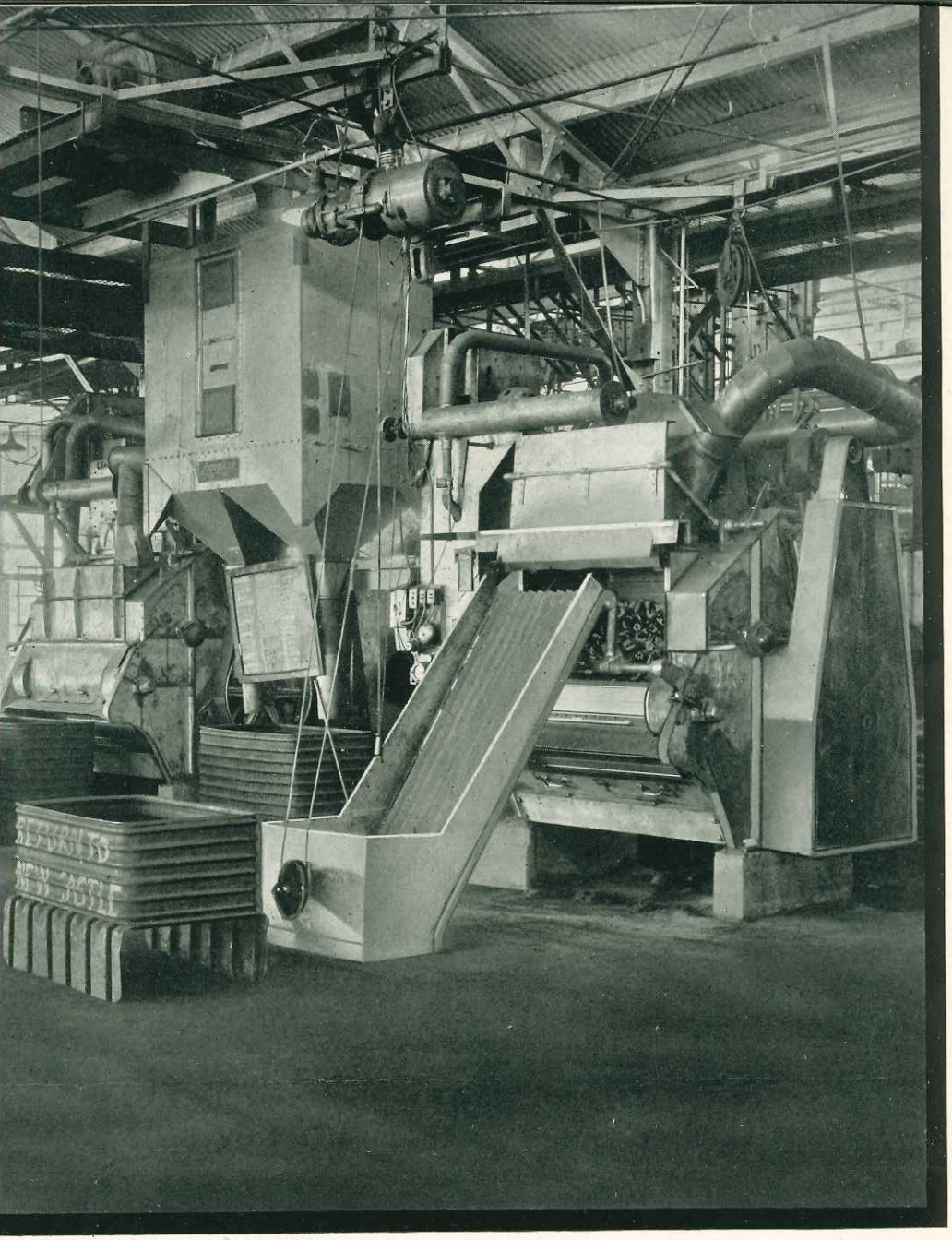
quickly pays for the equipment and when once paid for, these savings are net profit to the user. ★ In addition to the unusual savings in power, which alone makes the WHEELABRATOR Tum Blast a highly profitable investment, it greatly cuts cleaning time. With the WHEELABRATOR there is absolutely no dead zone in the cleaning chamber. This fact plus the greater effectiveness of the WHEELABRATOR method of cleaning, increases the production from 25% to 40%. ★ These facts concerning the WHEELABRATOR, are borne out by actual data received from users. One user states, "Equipped with this device (Airless WHEELABRATOR) a Tum Blast will do approximately 50% more work than when operated by compressed air and the cost of power is very much lower." Another user is cleaning 1300 lb. loads of small malleable castings in 12 minutes. A user of two WHEELABRATOR Tum Blasts, is cleaning forgings, a difficult job, in loads up to 1400 lbs. in 12 minutes. The cleaning cost in this plant is much less than pickling. Another user who cleans 3 tons of hard iron and malleable castings per hour has entirely closed down his tumbling equipment. ★ Further interesting production reports and illustrations of the installations are given on the following pages. And they all attest the fact that the Airless WHEELABRATOR Tum Blast Cleaner offers to every blast cleaning user, who has work suitable for this type of equipment, a cleaning unit which will turn out work faster and at a greatly reduced cleaning cost.



ILLUSTRATED is the North & Judd Manufacturing Company WHEELABRATOR Tum Blast. Full loads of 1300 lbs. of small castings, the hardest work in the foundry to clean, was turned out in 12 minutes. The average loads are being cleaned in 7 minutes. ■

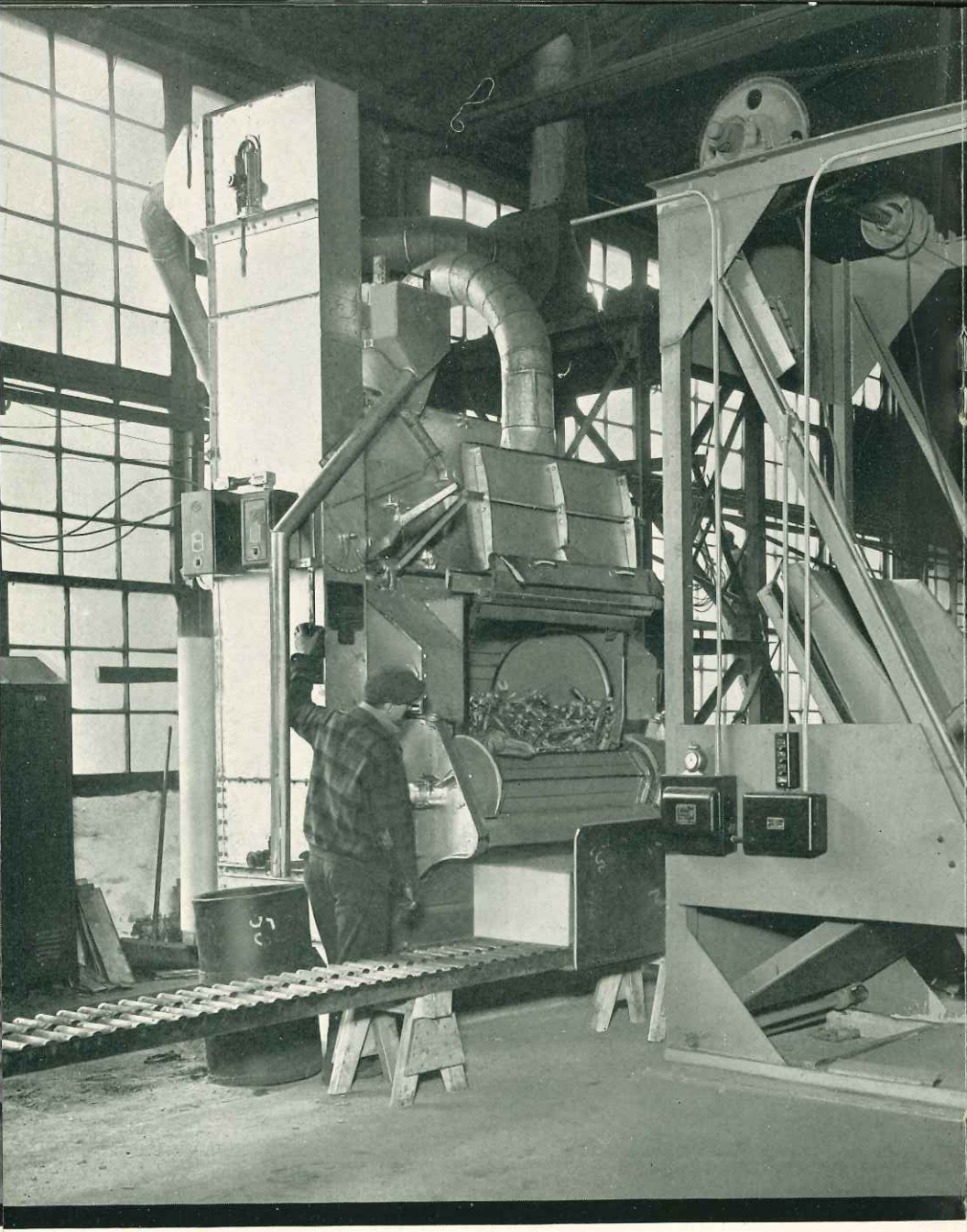


THE Airless WHEELABRATOR Tum Blast illustrated is installed at the Connecticut Malleable Castings Co. This machine is cleaning small malleable castings in loads from 500 to over 1000 lbs. This Tum Blast is capable of cleaning slightly less than 3 tons per hour.



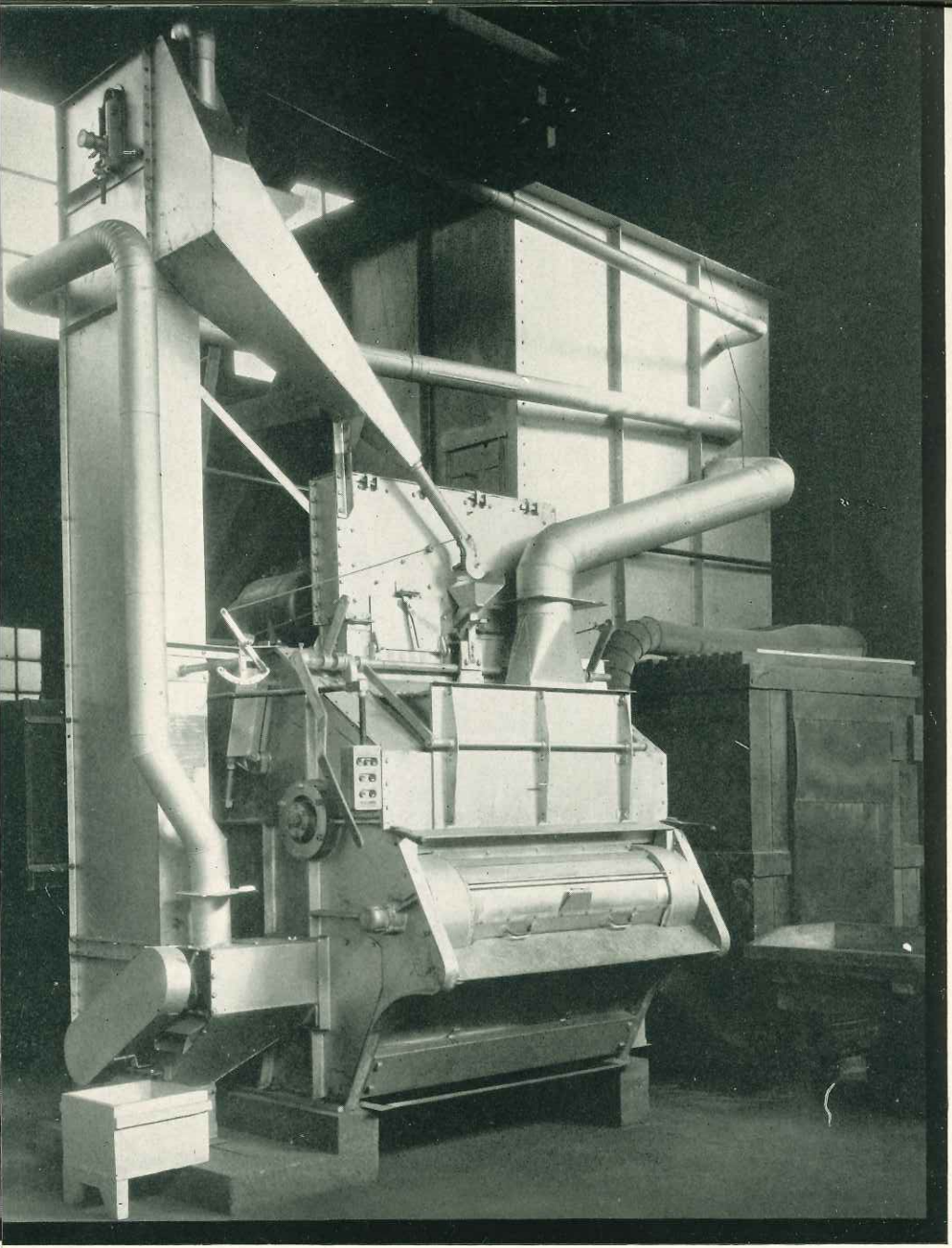
THESE two WHEELABRATOR Tum Blasts are installed in the forge shop of one of the large automotive companies. Loads of 1400 to 1650 lbs. are cleaned with a bright finish in 6 to 15 minutes. Loads of over 1500 lbs. of shafts have been cleaned in 22 minutes. This same work required from 4 to 6 hours in acid pickling. The cost of WHEELABRATOR cleaning is much less than pickling. ■

THIS WHEELABRATOR Tum Blast is installed in the heat treat department of a large automobile manufacturing plant, cleaning oxide scale from castings after annealing or normalizing operations. This is a difficult cleaning job and one which requires considerable more time than is used for ordinary cleaning problems. Work consists of generators, fan and water pump pulleys, bearing caps, oil pump bodies, water pump bodies, etc. Work is thoroughly cleaned at 2500 lbs. per hour. ■

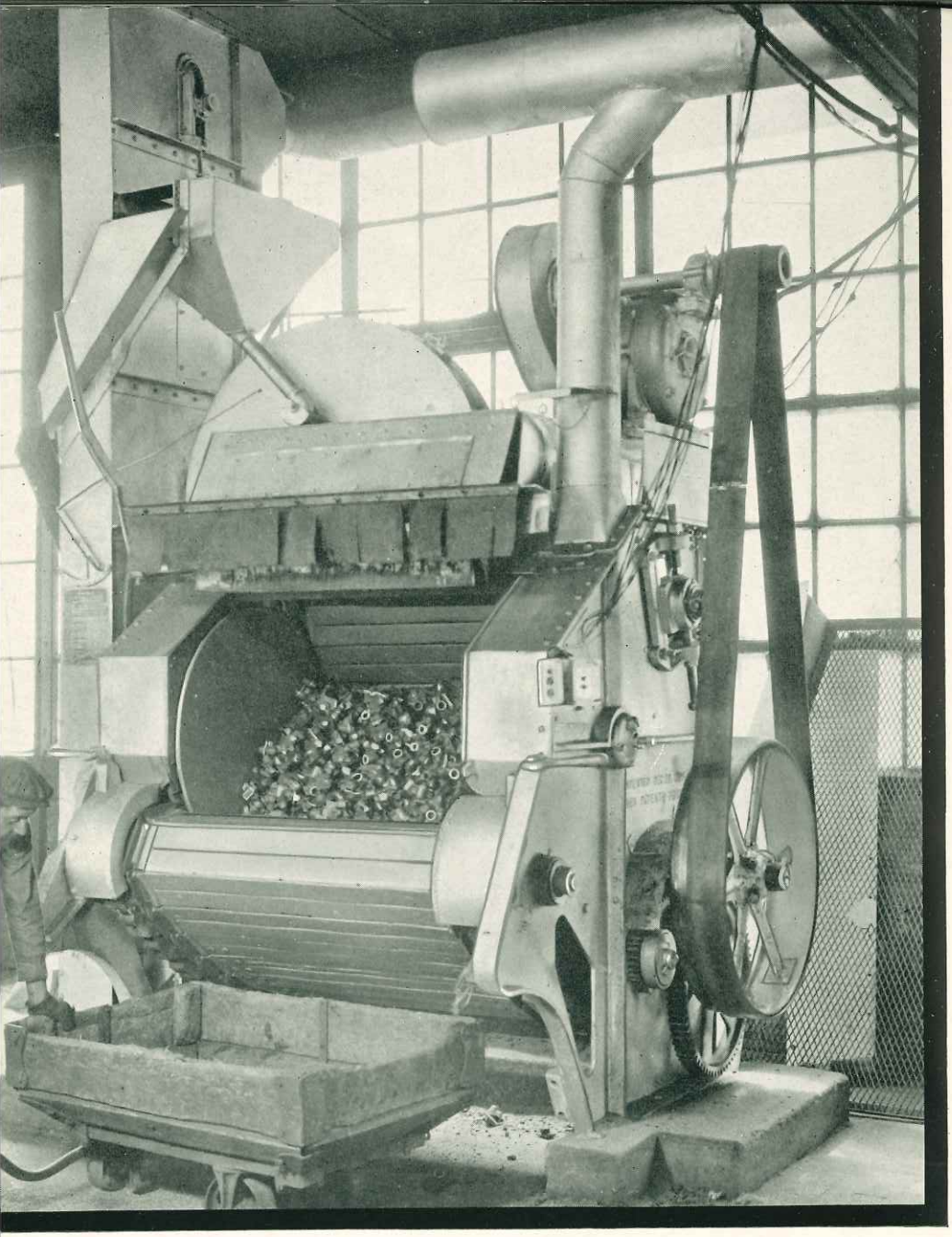


THIS WHEE
waukee. T
per hour. T
Their letter c

ELABRATOR Tum Blast is installed at the Chain Belt Company, Mil-
The equipment is cleaning 3 tons of malleable and hard iron castings
he Tum Blast has replaced a table, room and ten tumbling mills.
oncerning this equipment is reproduced on page 27. ■

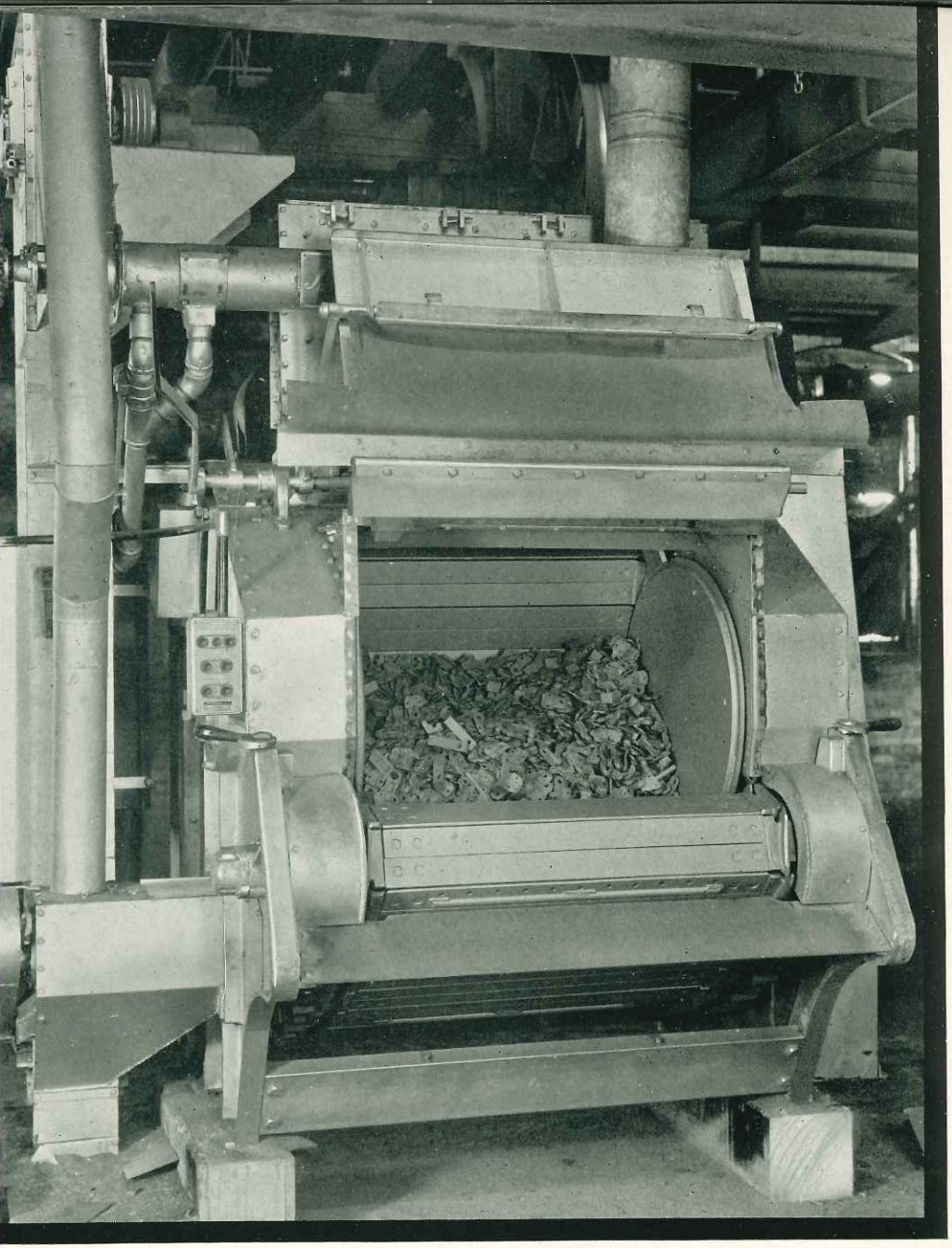


THE American Airless WHEELABRATOR Tum Blast illustrated is installed in the Central Foundry Company. It is cleaning loads from 700 to 800 lbs. in 10 minutes. A letter from this company concerning their Tum Blast is reproduced on page 26. ■



THE WHEELABRATOR Tum Blast illustrated is installed at the Benton Harbor Malleable Industries and cleans miscellaneous malleable castings in 8 to 10 minutes per load. Prior to the use of the Tum Blast, a sand blast barrel was used and required one hour and 10 minutes to do the same job. Their testimonial is shown on page 26. ■

THESE WHEELABRATOR Tum Blasts are installed in a large malleable and steel foundry. They have replaced 10 sand blast barrels. Miscellaneous castings are being cleaned in loads from 700 to 1000 lbs. in 7 to 15 minutes. Prior to the installation of the loading device, one of the Tum Blasts on a continuous run for 20 hours averaged 1 9/10 tons per hour. The loading device has facilitated handling castings thus enabling even better tonnage. ■



THE WHEELABRATOR Tum Blast illustrated is cleaning castings at the Troy Malleable Iron Company. Loads up to 1000 lbs. are being thoroughly cleaned in 8 minutes. Some of the more difficult work is being run 10 to 15 minutes for perfect cleaning. ■

CENTRAL FOUNDRY COMPANY
MANUFACTURERS OF
GREY IRON CASTINGS
FORT WAYNE, INDIANA

OFFICE 1921 EAST WAYNE STREET
TELEPHONE A-8145

DATED April 11, 1934

American Foundry Equipment Co.
Mishawaka, Ind.

Gentlemen:

We are pleased to inform you that our Tum Blast WHEELABRATOR is doing all you claim for it and would be glad to recommend it to any prospective customers you have.

The cleaning time compared to tumbling mills there is no comparison, as it takes about ten minutes to clean 700 to 800 pounds of castings in the Tum Blast WHEELABRATOR without breakage or sharp lines being destroyed. The castings are perfectly cleaned inside and out and small castings are not lost

Since we had our Tum Blast WHEELABRATOR, there are customers that now insist on that kind of cleaning

Thanking you for the pleasant dealings we had with you, we are,

Very truly yours,
CENTRAL FOUNDRY CO
Ed Arnold Jr

BENTON HARBOR MALLEABLE INDUSTRIES
MALLEABLE GRAY IRON AND DIE CASTINGS. STEEL FORGINGS.
ROUGH OR MACHINED TO BLUE PRINT
BENTON HARBOR
MICHIGAN

June 19, 1933

The American Foundry Equipment Co.
Mishawaka, Ind.

Gentlemen:

We have just commenced to use the WHEELABRATOR, which you recently attached to one of our Tum Blast mills. This device promises to be a long advance over compressed air for cleaning castings, for the following reasons:

1. It does the work much faster. It cleans the castings cleaner.
2. The cost of operation is about 50% the cost of air.

We are looking forward to the day when we will use no compressed air for cleaning castings.

Very truly yours,

BENTON HARBOR MALLEABLE INDUSTRIES
R. Flood
President

Machine started in operation May 24, 1933

The Dayton Casting Company

ESTABLISHED 1905

IRON FOUNDERS

KISER AND CHAPEL STREETS

DAYTON, OHIO

April 5, 1934

American Foundry Equipment Co.
Mishawaka, Ind.

Gentlemen:

We installed the Airless WHEELABRATOR about a year ago and were one of the earliest users of this revolutionary method of cleaning castings without the use of costly compressed air

The improvements you have since made on our machine, free of charge, have finally eliminated the baby ailments that were to be expected from this revolutionary machine.

The Airless WHEELABRATOR does a wonderful job of cleaning in a fraction of the time required by compressed air.

You are at liberty to refer any prospect to us and we will be pleased to show anyone the machine in operation.

THE DAYTON CASTING CO.

Oscar Schwegel

Oscar Schwegel
Superintendant

CHAIN BELT COMPANY

MANUFACTURERS REX CHAIN-REX CONCRETE MIXERS
REX SPROCKETS - REX TRAVELING WATER SCREENS
REX ELEVATORS AND REX CONVEYORS. ESTABLISHED 1880

MILWAUKEE, WIS.

CABLE ADDRESS BELTCHAIN

October 25, 1933

Mr. Verne E. Minich
American Foundry Equipment Co.
Mishawaka, Ind.

Dear Mr. Minich:

In answer to your letter of October 24th, we have had the WHEELABRATOR Tum Blast in operation now for a period of seven weeks and have now put the machine into full production.

The installation of the electrically operated loading skip has practically doubled the capacity of the Tum Blast machine, as compared to our previous method of hand loading. We are now operating on cleaning hard iron castings, and the machine is handling our present tonnage very nicely, allowing us to shut down all of our hard iron mills.

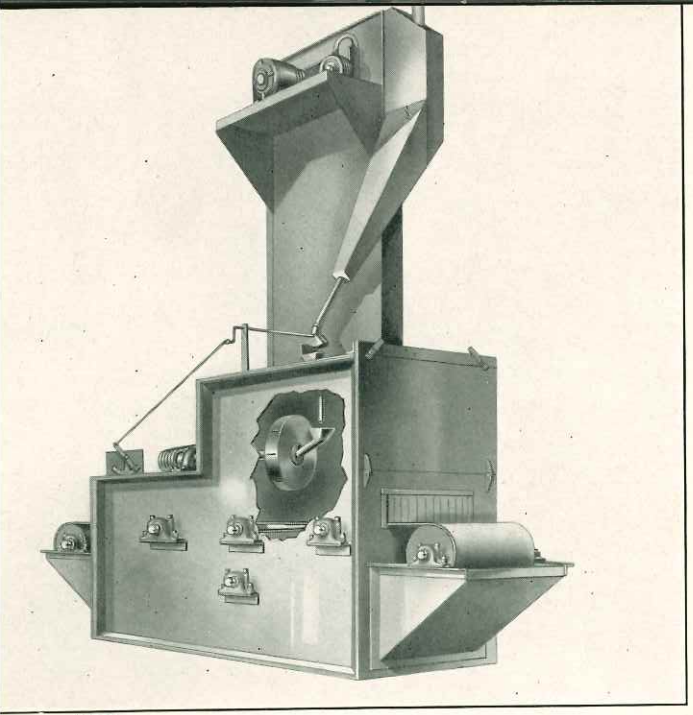
In addition to eliminating a bad source of dust by the shutting down of older equipment mentioned above, we have found that the new machine does a better cleaning job than we were previously able to do. The machine has come up to our expectations, both as to the type of job that it does on cleaning, and to the production we have obtained from it.

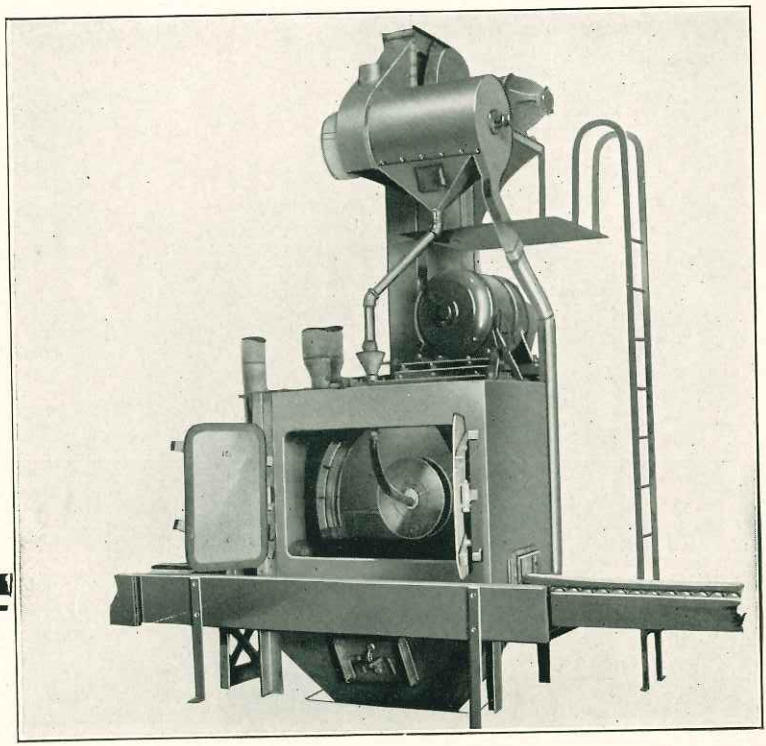
Very truly yours,

F. K. Niall

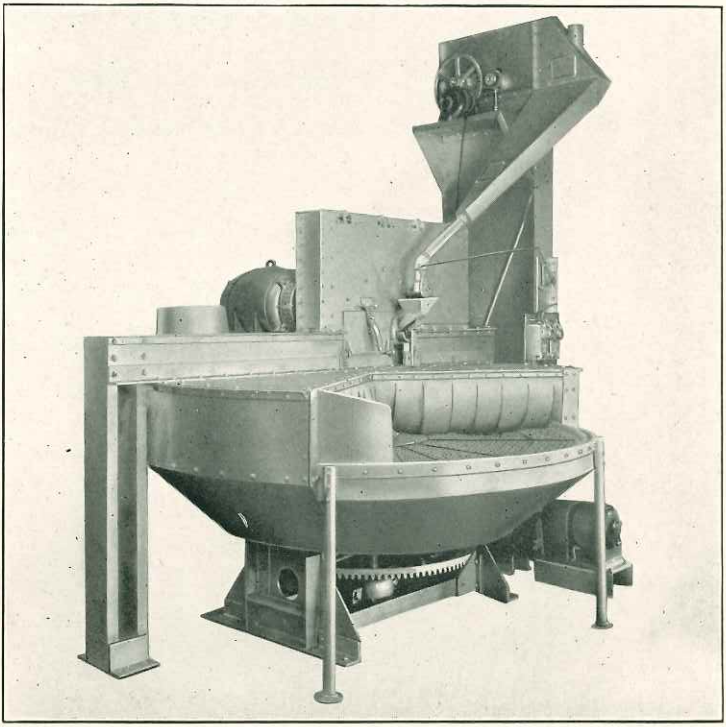
Vice President

THE STEARNS CONVEYOR COMPANY CLEVELAND
DIVISION OF CHAIN BELT COMPANY





ILLUSTRATED are three other standard types of American Airless WHEELABRATOR equipment. The Room is applicable for cleaning steel sheets, shapes, and large miscellaneous castings of all types. The Cabinet is suited for tubing, billets, and bars. Flat work and castings which are not suited for the Tum Blast may be cleaned on the WHEELABRATOR Table. Although these represent the standard types of Airless WHEELABRATOR equipment, many installations are designed and engineered for the particular job. Regardless of your work, Airless WHEELABRATOR equipment can be successfully used.



451/75

THE AMERICAN LINE

● Airless Wheelabrator Abrasive Cleaning Equipment ● Abrasive Blast Equipment of all Types ● Dust Collectors ● Sand Cutting Machines ● Aluminum Taper Flasks ● Pouring Jackets ● Core Machines ● Rod Straighteners ● Wheelabrator Shot and Grit ● Long Lyfe Nozzles

American Foundry Equipment Co.
Mishawaka, Indiana, U. S. A.